

**REMARKS****Summary of the Office Action**

In the Final Office Action dated May 21, 2003, claims 1-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over allegedly Applicant admitted prior art (AAPA in view of U.S. Patent No. 6,466,282 to Sasuga et al.

**Summary of the Response to the Office Action**

Applicants have amended claims 1 and 11 to further define the subject matter of the invention. Applicants have added new claim 21.

**The Rejection under 35 U.S.C. 103(a)**

Applicants respectfully traverse the claim rejection under 35 U.S.C. § 103(a). As instructed by MPEP §2143.03, "to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art."

Independent claims 1 and 11, as amended, are allowable. Applicants respectfully submit that none of the cited references, singly or in combination, teaches or suggests at least the features of "a light-shielding member overlapping the switching device and extending from an end at the pixel electrode side of a metal thin film provided within the switching device into the pixel area, the light shielding member covering and extending past all sides of the metal thin film with a margin sufficient to block light incident on the metal thin film (Emphasis added)," or like features recited in claims 1 and 11, as amended.

Applicants respectfully submit that the Examiner's response to Applicants' arguments on page 6 of the Final Office Action is insufficient for sustaining the § 103 claim rejection for at least the following reasons. First, as noted by the Examiner, Sasuga et al. discloses that the shielding film (BM) at the peripheral portion is extended to the outside of the seal portion (SL) as shown in FIGs. 17-20 of Sasuga et al. The shielding film (BM) extends from the end of the pixel electrode side of a drain electrode (SD1/SD2), as shown in FIG. 2 (the TFT electrode is covered by the black matrix BM, see Fig. 2). However, these structures disclosed in Sasuga et al. are not the structure of the "light shielding member" recited in claims 1 and 11, as amended. In particular, the claims requires the "light-shielding member, ..., extending from an end at the pixel electrode side of a metal thin film provided within the switching device into the pixel area, the light shielding member covering and extending past all sides of the metal thin film with a margin sufficient to block light incident on the metal thin film (Emphasis added)." Sasuga et al. simply does not disclose such an extension of the light shielding member into the pixel area and past all sides of the metal thin film with a sufficient margin, nor does Sasuga et al. provide any specific suggestions for such a structure. For example, as shown in FIGs. 1 and 2 of Sasuga et al., an edge of the black matrix (BM) substantially vertically aligns with the edge of the electrode SD1 and SD2, thereby lacking any meaningful margin. Thus, there should be no dispute that Sasuga et al. (and the allegedly admitted prior art) does not teach or suggest the above-recited features of the "light shielding member" of the present invention, as recited in claims 1 and 11.

Further, independent claims 5, 9, 15, and 19 are allowable. Applicants respectfully submit that none of the cited references, singly or in combination, teaches or suggests the

features of "a light-shielding member overlapping the charging device and extending from an end at the pixel electrode side of the metal thin film into the pixel area with a margin sufficient to block light incident on the metal thin film (Emphasis added)," or like features recited in claims 5, 9, 15, and 19.

FIGs. 1 and 3 of Sasuga et al. unequivocally show that metal electrode d2, d3 for the storage capacitor are not covered by the black matrix (BM) at all. In fact, FIGs. 1 and 3 of Sasuga et al. show that the entire metal electrode d2, d3 are exposed. Thus, there should be no dispute that Sasuga et al. (and the allegedly admitted prior art) does not teach or suggest the above-recited features of the "light shielding member" of the present invention, as recited in claims 5, 9, 15 and 19.

Because not all the claim limitations are taught or suggested in the cited references, Applicants respectfully submit that no proper *prima facie* case of obviousness has been established. As instructed by MPEP §2143.03, "to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art."

Furthermore, there is no suggestion or motivation to modify the cited references to reach the above-recited features of the light shielding member, as recited in claims 1, 5, 9, 11, 15, and 19. In the subsequent paragraph on page 6 of the Office Action, the Examiner appears to argue that while all the claim limitations are not disclosed by the prior art (which, in and of itself, already establishes impropriety of the § 103 rejection as discussed above), it was a "common sense" or "would have been a routine skill in the art" to modify the reference teachings to meet the above-recited features of the claims.

Applicants respectfully submit that these rationales have been explicitly rejected as improper rationales for obviousness rejection under the U.S. case law. As instructed by MPEP §2143.01, "[a] statement that modifications of the prior art to meet the claimed invention would have been " well within the ordinary skill of the art at the time the claimed invention was made" " because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references (citing *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993))."

On page 6 of the Office Action, the Examiner appears to rely on the general desirability of improving contrast in Sasuga et al. as the reason for modifying the teachings. It is true that the light shielding layer is provided in part for improving display contrast. However, such a general statement of the purpose of the light shielding layer lacks a specificity and is insufficient to provide the required motivation or suggestions to modify the prior art teachings. The fact of the matter is that the very reference (Sasuga et al.), which discusses the general purpose of the light shielding layer (BM), does not disclose the above-recited features of the light shielding member of the present invention. Nor does Sasuga et al. teach or suggest desirability of covering the metal layers of TFT and storage capacitors to further improve contrast. Because these metal layers are also light blocking layers, it is plausible that at the time of the Sasuga et al. disclosure, covering the metal layers of TFTs or storage capacitor was not considered necessary for further improvement of contrast. Thus, Applicants respectfully submit that the Examiner is relying on

improper rationales of “well within the ordinary skill of the art” or improper “hindsight” reasoning.

In view of the foregoing, Applicants respectfully submit that independent claims 1, 5, 9, 11, 15, and 19 are allowable. Dependent claims 2-4, 6-8, 10, 12-14, 16-18, and 20 are allowable at least because of their respective dependencies upon allowable claims 1, 5, 9, 11, 15, and 19 and for the additional features they recite. Accordingly, Applicants respectfully request that the rejection of claims under 35 U.S.C. § 103 be withdrawn.

Applicants have added new claim 21. The features recited in claim 21 are supported by paragraph [0030] of the as-filed application. Applicants respectfully submit that new claim 21 is allowable at least because its dependency on allowable claim 1 and for the features it recites.


### **Conclusion**

In view of the foregoing, Applicants respectfully request reconsideration of this application. Should the Examiner believe that anything further would be desirable to place this application into even better condition for allowance, the Examiner is invited to contact the Applicants’ undersigned representative by telephone at (202) 739-5660.

**EXCEPT** for issue fees payable under 37 C.F.R. §1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account 50-0310. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. §1.136(a)(3).

Respectfully submitted

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